

REMARKS

Claims 8-18 and 30-35 are pending in the application. Claims 8, 13, 14, 43, and 33 are amended. Entry of this amendment is solicited because it places the application in condition for allowance.

State of Drawings

The Applicant notes that the present Office Action is silent as to the drawings that were submitted with the previously submitted amendment, and respectfully requests that the formal drawings be specifically approved.

Claim Rejections – 35 U.S.C. § 112

Claims 13 and 14 are amended to correct errors in antecedent basis, which renders the previous rejection to those claims moot. Claims 32 and 33 are amended to depend from claim 31, which obviates the rejection under 35 USC §112 that claims 32 and 33 depended from a canceled claim. The Applicant thanks the Examiner for pointing out these errors and requests that this rejection be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 8, 12, 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards (US 5,855,966) in view of Economy et al. (US 4,515,828). Because these references fail to teach or suggest all of the features of amended claim 8, the Applicants respectfully request that this rejection be withdrawn.

Previously pending claim 8 included the following features about the smoothening layer (16):

“made of a soluble polymer material having a flowability such that the top surface of said smoothening layer displays a smaller roughness than the surface on which it is formed.” (portion of previously pending claim 8)

Amended claim 8 clarifies when the solubility of the smoothening layer (16) is determined:

“made of a polymer material which has a flowability such that the top surface of said smoothening layer displays a smaller roughness than the surface on which it is formed and *which is soluble after being formed on said master*” (currently pending claim 8 with proposed amendment emphasized)

Thus, the “soluble” feature of the smoothening layer (16) of the claimed invention was meant to refer to the hardened smoothening layer (16) which has been applied on the master (10) and which is ready for being coated with the object material. This is because embodiments of the Applicant’s invention keep open the possibility to remove the smoothening layer from time to time, as described in, for instance, the first paragraph of page 17 of the application, which states in part:

This releasing step is realised by immersing the entire set-up shown in figures 6a and 6b into a tank 22 filled with a solvent, for example acetone. The solvent dissolves the smoothening layer 16, for example the PMMA photoresist.

This feature is not found in the cited art of Economy et al, which instead discloses that a prepolymer material is applied on a surface to be planarized from a solution (Economy, Column 2, lines 15 et seq.). To this purpose, the prepolymer material needs to be soluble. However, after having been applied to the surface to be planarized, the prepolymer is then cured to form a hard and smooth planarization film on the surface having a very low surface roughness. After curing, the low roughness layer is no longer called a prepolymer, but instead just polymer, and this cured polymer layer is by no means soluble according to Economy et al. To the contrary, in Column 1, line 11, Economy et al. describes the cured polymer as:

“a tough adherent film”

And further, In column 4, lines 54-56, Economy et al. proposes to provide polymeric additives to the prepolymer

“to improve the toughness”

of the final planarization layer.

Contrary to embodiments of the invention, Economy et al. does not propose that the planarization layer, after being formed on the respective surface, should still be soluble in order to be removable from time to time. This is due to the technical application that Economy et al. has in mind as described in Column 1, lines 28-57. Economy's invention is assigned to IBM Corporation and refers to a data carrier disk that has a magnetic recording material applied on a substrate. Such a magnetic data carrier disk is produced once and then used for a very long time without any need to disassemble its various components. As a consequence, Economy et al. is not interested in providing a smoothening/planarization layer which can be dissolved from time to time. Consequently, the hardened polymer layer according to Economy et al. is described as tough adherent, cross-linked etc., but not as soluble. The only solubility consideration in Economy is that it be soluble before it is cured.

Thus, the combination of Economy et al. and Richards (US 5,855,966) fails to teach or suggest each and every limitation in the pending independent claim 8, and the Applicant therefore requests that the rejection be withdrawn.

Further, the present Office Action states that Economy et al. teach the claimed feature of: "releasing the object from the master" at Col 3., lines 1-9) (Office Action Mailed 2/19/2010, Page 4, first paragraph), but this assertion is specifically traversed, as the cited portion of Economy et al. does not teach or suggest this feature. Instead, as described above, Economy et al. is concerned with coatings for magnetic disks, and not for producing smooth objects from a master. Thus, for this reason alone the Office Action fails to show that the cited references teach or suggest each and every limitation in the pending independent claim 8, and the Applicant therefore requests that the rejection be withdrawn.

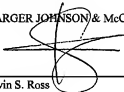
The remainder of the pending claims depend directly or indirectly from allowable claim 8, and therefore include each and every element recited in claim 8. The cited art of Hallman et al. (US 5,505,808), Richards (US 5,855,966), and Meeks (US 2002/0145740), discussed in the previous amendment and omitted here for brevity, fails to make up for the deficiency of Richards and Economy et. al in teaching or suggesting all of the features of pending claim 8. If an

independent claim is nonobvious under 35 USC 103, then any claim depending therefrom is nonobvious. MPEP 2143.03.

For the foregoing reasons, reconsideration and allowance of claims 8-18 and 30-35 of the application as amended is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

A handwritten signature in black ink, appearing to be 'K. Ross', is written over a horizontal line. The signature is stylized with loops and a long horizontal stroke.

Kevin S. Ross
Reg. No. 42,116

MARGER JOHNSON & McCOLLOM, P.C.
210 SW Morrison Street, Suite 400
Portland, OR 97204
503-222-3613
Customer No. 20575